

BILL # HB 2221

TITLE: human cloning; public funding; prohibition

SPONSOR: Stump

STATUS: House Engrossed

REQUESTED BY: House

PREPARED BY: Shelli Carol

FISCAL ANALYSIS

Description

This bill would prohibit the use of public monies, including private donations to public institutions, for human cloning. This ban would include both reproductive cloning, with the intent of birth, and therapeutic cloning, with the intent of embryonic research. This bill would not prohibit the use of public monies for research on embryonic cells, such as stem cells, as long as the creation of the embryo and the extraction of the cells occurred in another state.

Estimated Impact

The JLBC Staff estimates that this bill would have little short-term fiscal impact, as no publicly funded and little or no privately funded human cloning research is currently being conducted in Arizona. Meanwhile, given the undeveloped state of the bioscience cloning industry in Arizona, a useful projection of future financial impacts is speculative at best.

The state universities concur that this bill would have few financial consequences in the near future and did not provide an estimate over a longer time horizon.

Analysis

When considering Arizona's biotechnology industry over all, statistics from the Biotechnology Industry Organization (BIO) show that Arizona employs roughly 3,300, or 0.4%, of the bioscience industry's 885,000 workers. Compared to the 2.6 million Arizonans, or 1.9%, employed out of the nation's 140.2 million total workers, the bioscience-specific figures are relatively low. Meanwhile, BIO reports that purchases of all types of biopharmaceutical products contributed \$10.1 million, or 0.2%, of Arizona's \$4.2 billion sales tax collections in FY 2004.

Nationally, the entire research and testing sector comprises only 13% of the bioscience industry. Human cloning is a relatively new technology to enter the economy and federal funding restrictions on cloning have slowed its commercial development. Information is not available on the size of this industry sub-sector. Nationally, public and private universities currently conduct most human cloning studies. However, no Arizona public university is researching human cloning and none is aware of any available private grants for such research. Therefore, JLBC Staff does not believe that this bill would cause any revenue losses to the state in the short-run.

On a longer time horizon, the fiscal impact of this bill is more difficult to speculate. The bill could limit Arizona's future competitiveness in attracting bioscience organizations and investment. Due to federal funding restrictions and similar bans in other states, private sources account for the majority of human cloning research funding. BIO reports that, during the first half of 2004, venture firms invested over \$2.4 billion across all the life sciences nationwide. It is difficult to estimate the magnitude of potential foregone revenue from a state restriction on one bioscience industry sub-sector, especially when the current main application of human cloning research is the creation of stem cells, which Arizona public institutions could still import and study under this bill.

According to Battelle Memorial Institute, a nonprofit technology development consulting organization, trends in the biosciences industry show that successful states are targeting specific industry niches, not the industry as a whole. Considering that California already leads the research and testing sector with 24% of nationwide employment and has approved \$3 billion in public support for therapeutic cloning research, the sub-sector may not provide a significant financial contribution to Arizona in the future, regardless of this bill.

Local Government Impact

This bill would prohibit the use for human cloning of public monies from or passing through local governments. As on the state level, JLBC Staff does not estimate any significant short-term fiscal impact. Meanwhile, given the undeveloped state of the cloning sub-sector of the biosciences industry, a useful projection of future financial benefits or losses cannot be determined.

3/4/05